

# **SUMMARY OF THE NATIONAL DATABASE COMMITTEE MEETING JULY 1, 1998**

The National Database Committee of the National Environmental Laboratory Accreditation Conference (NELAC) met on Wednesday, July 1, 1998, at 8:30 a.m. Central Daylight Time (CDT) as part of the Fourth NELAC Annual Meeting in San Antonio, TX. The meeting was led by its chair, Mr. Matt Caruso of the State of New York Department of Health. A list of action items is given in Attachment A. A list of participants is given in Attachment B.

## **INTRODUCTION**

Mr. Caruso began the meeting by introducing members of the National Database Committee. The committee has developed a strawman structure and design for the national database. The main topics of discussion were the necessary data elements and procedures, data display, and who is responsible for housing the database. He said that Dr. Jim Stemmle has designed an interim design for the database to be used as the first class of accrediting authorities become approved. Mr. Caruso then handed the meeting over to Dr. Stemmle to present some overheads illustrating the database design.

## **MANAGING NELAP DATA**

The potential customers, or users, of the database are laboratories, NELAP, States, 3<sup>rd</sup> party assessors, customers of laboratories, regulators and litigators. Dr. Stemmle described the mandate of the committee as developing recommendations for a web-based NELAC database to cover both accreditors and laboratories. He said that the first need in developing the database is the Accrediting Authorities System Design. Next will probably be proficiency testing.

## **ACCREDITING AUTHORITY SYSTEM DESIGN**

Dr. Stemmle presented overheads to illustrate the proposed tables and data elements in the design of the Accrediting Authority System for the interim database.

### **Accreditors Table**

- ID Number
- Organization (organization name, phone, email, street, city, state, region, zip code, PO Box, PO Box zip code)
- Contact Person (name, phone, fax, email)
- Date (expiration, 2-yr review)
- 3<sup>rd</sup> Party Assessor Used(y/n)
- Fee (y/n, description, link or reference)
- Out of state Applicants (y/n, from where?)
- Scope (~35 combinations of statute and discipline exceptions)

Scope: Currently, most are just limited to just drinking water.

### **3rd Party Table**

- 3<sup>rd</sup> Party ID
- Company (name, fax, phone, email, street, city, state, zip code, PO Box, PO Box zip code)
- Contact Person (name, phone, fax, email)

### **3rd Party Links**

- Accrediting Authority ID
- 3<sup>rd</sup> Party ID
- Date
- Start/End

### **Statute Discipline Lookup Table**

Dr. Stemmler showed an overhead which illustrated categories in which an accrediting authority can choose to seek accreditation. The table was entitled "Most populated (by the first class of applicants) categories." The table contained a list of some EPA statutes which require testing: CAA, CWA, SDWA, RCRA, CERCLA, FIFRA, and TSCA. Disciplines were then check-marked under each statute: chemistry, WET, microbiology, radiochemistry, microscopy, and field measurements. He said that the lists of analytes under each of these disciplines still needs to be defined.

### **Exceptions Table**

- Accrediting Authority ID
- Statute/Discipline Area
- Method not Included

### **Accomplishments**

- Method for establishing Accreditor ID. The ID will be a three-character code (2-letter code for state or organization and a number assigned by NELAP).
- Method for establishing Laboratory ID. First three characters will be accrediting authority and next characters will uniquely identify the laboratory. It was asked about using the EPA lab codes. Dr. Stemmler said that he thinks these two codes should be in sync with each other and proposed that another field be added to keep up with other lab codes. Mr. Caruso said that new codes are necessary because not all labs have an EPA code (e.g. microbiology). A translation table could be used to achieve this.
- Development contractor onboard, development process initiated.

### **Problems (Current and Anticipated)**

- Method for establishing 3<sup>rd</sup> Party Assessor ID
- What to require of the States (Internet access only or database system)

Dr. Stemmler said that the system will be web based and introduced Ms. Jo Ann Kerrick, the contractor who will be designing this web-based system.

## **NATIONAL LABORATORY DATABASE**

Mr. Matt Caruso presented information about the national laboratory database.

### **National Database Functions**

- Answer frequently asked questions (FAQs)
- Provide mechanisms for data updating by Authorities
- Notify secondary Accrediting Authorities of changes made by Primary Accrediting Authorities

### **Frequently Asked Questions**

- Is lab Q approved for....?
- Who are the approved Accrediting Authorities? For what are they approved?
- What laboratories are approved in a particular jurisdiction?
- What laboratories are approved by...?

Mr. Caruso asked the audience if there were other questions that need to be answered.

### **Master Laboratory Table**

- Unique National Laboratory Identifier (UNLI) -- Individual laboratories will have one ID, nationally.
- Lab Name
- Lab Director's Name (Last, First - MI)
- Lab Location (street address, city, state, zip)
- Lab Telephone Number (area code, telephone number)

### **Accreditation Table**

- UNLI
- Program (SDWA, CWA, etc.)
- Analyte
- Method
- Status (approved, not approved)
- Status Date

### **Accreditors Table**

- UNLI
- Accrediting Authority ID
- Accrediting Authority identifier for this laboratory
- Type of accreditation issued (primary or secondary)

This is public information. It will be accessible through the Internet. Confidential information has not been anticipated. Actual laboratory deficiencies will be maintained by the accrediting authorities.

## **DISCUSSION**

### **Archival System**

It was asked whether there were any plans to have some kind of archival system. Mr. Caruso replied that this was assumed to be the responsibility of the Accrediting Authorities.

### **Type and Availability of Information**

Another question was whether information from one Accrediting Authority would be available to another Accrediting Authority. If a lab has serious deficiencies, will that information be passed on? The commentor was concerned about differences in strictness between Accrediting Authorities. The committee reminded them that this is the purpose of developing national standards and responded that these kind of geographic problems will not happen, because labs will be covered by their State.

Someone commented that they thought this information should not be limited to the Accrediting Authorities. Another comment was that it is important information as to why a lab was suspended (e.g., bad weather shut them down). Yet another commentor asked to include locations for laboratories in foreign countries.

It was asked whether captive laboratories such as waste treatment plants and other municipal facilities should be included. A commentor said that this would force the States into a two-tiered system. A committee member said that at a minimum, we would need a field to indicate whether a lab was commercial (i.e., offering their services to the public.) Another commentor said that laboratories should be listed, whether or not it is open to the public for services, because State governments will want access to this kind of data too. There were several who voiced a desire to see laboratories approval/suspension/revocation information on the web pages.

### **Tracking Changes**

A question was raised about what happens when NELAC standards change. Mr. Caruso said that the year of accreditation will be tracked in the database. However, tracking methods over time is the responsibility of the Accrediting Authority.

### **Frequency and Method of Updates**

There was some discussion about frequency of updates. It is intended that the national database to be automatically uploaded with new data every day. A Primary Accrediting Authority has a responsibility to report changes. Someone commented that there needs to be a feedback mechanism to report both positive and negative changes. Another participant asked whether it necessary to store the information in two places, the national database and individual State databases. Committee response was that it would be technically very difficult to maintain only one database with the States tied in directly. It would require specialized software for every State. It would impose requirements on States to become technically sophisticated. This does not seem feasible now, but may be an eventual solution. The national database will probably have links to States on the web pages, but NELAC cannot dictate this requirement to the States.

Primary Accrediting Authorities will be responsible for maintaining their data, but updates are dependant on their systems. It was asked whether a database and daily updates should be made a

requirement of the Accrediting Authorities. It was proposed from the floor that Accrediting Authorities be mandated to update their system on a regular schedule. For example, new information must be posted within 96 hours of a change in the laboratory's accreditation status.

### **Platform for Database**

The platform will be driven by the size of the database and required functionality. Another consideration will be the hit rate of the database. There is not enough information to develop costing at this time.

### **Request for Information**

A comment was given that a questionnaire could be distributed at the NELAC meetings or posted on the NELAC web site to collect information. A committee member said that Accrediting Authorities have been contacted with a questionnaire. Response to the questionnaire showed a broad range in the computer capabilities of Accrediting Authorities.

The committee is requesting FAQs and comments on functionality. Those who wish to respond may contact Mr. Caruso at his email address "caruso@wadsworth.org" or another committee member.

### **Demonstration: State of Connecticut**

Mr. Nick Macelletti and Mr. Jon Dineen showed a database that the State of Connecticut has been working on. It is a prototype developed in Microsoft Access and physically located on a local area network. The purpose was to illustrate to Accrediting Authorities (especially those with outdated or no database capabilities) some of the features that can be built into this readily available database software.

Mr. Macelletti said that he found that laboratories could be grouped into categories. To do this, laboratories are assigned a size category and then associated with a source (or matrix). They developed code to enable data entry of laboratory certifications in a batch mode. The database associates the lab with source and analyte. They expect to manage about 300 laboratories, 400 analytes, and 15 sources (or matrices).

**ACTION ITEMS  
NATIONAL DATABASE COMMITTEE MEETING  
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| <b>Item No.</b> | <b>Action Item</b>                                     | <b>Date To Be Completed</b> |
|-----------------|--|-----------------------------|
| 1.              | Include “country” filed in Master Laboratory Table     | Immediately                 |
| 2.              | Post FAQ/Functionality questionnaire on NELAC web site | 9/15/98                     |

**PARTICIPANTS  
NATIONAL DATABASE COMMITTEE MEETING  
JULY 1, 1998**

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